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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/532,023

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Kazuya Maekawa

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08/25/2008

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EXAMINER

DEXTER, CLARK F

ART UNIT

PAPER NUMBER

3724

MAIL DATE

DELIVERY MODE

08/25/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/532,023	<b>Applicant(s)</b> MAEKAWA ET AL.	
	<b>Examiner</b> Clark F. Dexter	<b>Art Unit</b> 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,6,7,11 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,8-10 and 13-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 May 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/16/08</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The amendment filed on May 27, 2008 has been entered.

### ***Election/Restrictions***

2. Newly submitted claims 6, 7, 11 and 12 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

These claims, Group III, are drawn to a scribe method/apparatus with a specific cutter configuration.

Group III does not require the specific technical features of position control steps/structure of Group I or the load control steps/structure of Group II; and conversely, Groups I and II do not require the specific technical features of the specific cutter configuration of Group III.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 6, 7, 11 and 12 have been withdrawn (along with previously withdrawn claims 3 and 4) from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Information Disclosure Statement***

3. The information disclosure statement filed on July 16, 2008 has been received and the references listed thereon have been considered.

***Drawings***

4. The drawings were received on May 27, 2008. These drawings are acceptable.

***Claim Rejections - 35 USC § 112, 1<sup>st</sup> paragraph***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1, 2, 5, 8-10 and 13-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The original disclosure does not provide support for the recitation "wherein at least one scribe line in the second direction intersects with at least one scribe line in the first direction" in combination with the recitation "wherein the formation of the intersection between the scribe line in the second direction and the scribe line of the first direction occurs without the scribe means being pressed against the existing scribe line in the brittle material substrate" as now set forth in claim 1. Rather, support is provided for scribe lines that do not intersect (i.e., "without producing intersection" as set forth in original claim 1) when the scribe lines are formed without the scribe means being pressed against the existing scribe line in the brittle material substrate.

Similarly, the original disclosure does not provide support for an apparatus including a travel motion control means that is capable of forming intersecting scribe lines while preventing "said scribe means from traveling across the point of intersection between said scribe lines of the first and second directions" as now set forth in claim 2 for the same or similar reasons as those described for the rejection of claim 1 above.

***Claim Rejections - 35 USC § 112, 2<sup>nd</sup> paragraph***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1, 2, 5, 8-10 and 13-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 6, the recitation "a scribe means" is vague and indefinite as to whether it refers to that previously set forth in line 4 or to another such scribe line; in line 8, the recitation "at least one scribe line in the second direction" is vague and indefinite as to whether it refers to that previously set forth in line 6 or to another such scribe line; in lines 8-9, the recitation "at least one scribe line in the first direction" is vague and indefinite as to whether it refers to that previously set forth in line 4 or to another such scribe line.

In claim 2, lines 9-10, the recitation "the point of intersection between the scribe lines" lacks positive antecedent basis, and further renders the claim vague and

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indefinite since it is not clear how a point of intersection between the scribe lines exists before the scribe means has reached and thus formed such a point.

***Claim Rejections - 35 USC § 102/103***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 2 and 13-15, as understood, are rejected under 35 U.S.C. 102(b) as anticipated by any one of Shimotoyodome, pn 6,460,258, pn 6,470,782, pn 6,478,206 (hereafter the Shimotoyodome patents) or, in the alternative, under 35 U.S.C. 103(a) as obvious over any one of the Shimotoyodome patents in view of Zumstein, pn 3,834,258.

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The Shimotoyodome patents each discloses a scribe apparatus with every structural limitation of the claimed invention as best understood from the claims including:

a scribe means for generating a high-penetration vertical crack in the brittle material substrate by applying impacts of a short period to the point on the surface of the brittle material substrate; and

a travel motion control means (e.g., 50, and the moving mechanism that causes vertical movement of the scribe means) for controlling the travel motion of the scribe means, wherein said travel motion control means prevents said scribe means from traveling across the point of intersection between the scribe lines of the first and second directions (e.g., when the moving mechanism that causes vertical movement in the prior art moves the cutter away from the workpiece, the scribe means is prevented from traveling across the workpiece and thus would be prevented from moving across a point of intersection).

Regarding claims 13-15, these claims set forth an intended use of the prior art apparatus and the prior art apparatus is/are fully capable of performing the recited functions.

In the alternative, if it is argued that a travel motion control means pertains to or otherwise requires a computer programmed to cut a specific pattern or patterns (e.g., to cut perpendicular or transverse lines that do not intersect), more specifically one “that prevents said scribe means from traveling across the point of intersection between the scribe lines of the first and second directions,” the Examiner takes Official notice that, as

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best understood from the claim language, the use of such programmable computers with scribing or scoring devices is old and well known in the art and provides various well known benefits including automatic operation of the scribing or scoring device.

Zumstein discloses one example that teaches using a computer for controlling a scribing/scoring device (e.g., see the paragraph bridging paragraphs 8-9). Therefore, it would have been obvious to one having ordinary skill in the art to provide such a programmable computer in combination with the scoring/scribing devices of the Shimotoyodome patents for cutting any desired pattern.

### ***Response to Arguments***

12. Applicant's arguments filed May 27, 2008 have been fully considered but they are not persuasive.

In the fourth paragraph on page 13 of the amendment, applicant argues that the prior art does not teach or suggest limitations of the claimed invention. The Examiner respectfully disagrees. As stated in the above prior art rejection, the prior art discloses all of the claimed structure and is fully capable of performing the functions recited in the apparatus claims. That is, the prior art is fully capable of being operated to advance to a cross scribe line, be raised above the workpiece and scribe line, advanced across the scribe line without contacting the scribe line, lowered on the other side of the scribe line, and then advanced along the workpiece.

Regarding the fourth paragraph on page 14 and the paragraph bridging pages 14-15 of the amendment, it is respectfully submitted that a teaching of such a function in



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the prior art is not necessary to meet/reject an apparatus claim. Rather, the prior art is only required to disclose structure capable of performing such a function.

Regarding the second paragraph on page 14 of the amendment, again it is respectfully submitted that a teaching of such a function in the prior art is not necessary to meet/reject an apparatus claim. Rather, the prior art is only required to disclose structure capable of performing such a function. Regarding the argument that none of the cited references teach or suggest a travel motion control means specifically programmed to control the scribe means, it is respectfully submitted that no programming structure or device is clearly and specifically claimed. Applicant is respectfully reminded that the claims are to be given their broadest reasonable interpretation and are to be considered in light of the specification and limited thereby.

Applicant's additional arguments on pages 14-15 of the amendment have been considered, but are not persuasive for essentially those reasons described above.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark F. Dexter whose telephone number is (571)272-4505. The examiner can normally be reached on Mondays, Tuesdays, Thursdays and Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer D. Ashley can be reached on (571)272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Clark F. Dexter/  
Primary Examiner, Art Unit 3724**

cfd  
August 21, 2008